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Module 4 Lab Activity
September 25, 2019

1. Create a new folder designated for lab work on your computer.
2. Start a new empty project in a new working directory and save it to the folder you created.
3. Create new R Notebook and save it as “Iris data exploration”
4. Set the title of your R Notebook title as “Iris data exploration” and the subtitle as your name.
5. Request a table of contents to be produced as part of the html output.
6. Delete all of generic text that is generated when you created the Notebook (e.g. “This is an [R Markdown](http://rmarkdown.rstudio.com) Notebook…”).
7. Insert a new R chunk with a first level header: “Load Packages.”
    a. Prevent any output generated by this chunk from being displayed.
    b. Load the tidyverse and psych libraries.
8. Insert new R chunk with the first level header: “Import Data.”
    a. Prevent any output generated by this chunk from being displayed
    b. Write a comment within the chunk: “I am going to import the data into R”
    c. Read iris.csv into R and assign it to a new object called iris_data.
9. Insert a new R chunk with the first level header: “See the structure of the dataframe.”
    a. Use the glimpse function to examine the structure of the data.
10. Insert a new R chunk with first level header “Examine descriptives using the summary function.”
    a. Use the summary function to summarize all of the variables in iris_data.
11. Insert a new R chunk with first level header “Examine descriptives using the describe function”
    a. Use the describe function to summarize all of the variables in iris_data.
12. Insert new R chunk.
    a. Add headers:
        i. First level: “Creation of plots”
        ii. Second level: “Exploration of histograms”
        iii. Third level: “Two simple plots”
    b. Use ggplot to create a histogram of Sepal Length (petal width goes on the x-axis)
        i. Set the binwidth to 0.1
        ii. In a separate plot within the same code chunk, set the binwidth to 0.5
13. Under “Run,” select “Restart R and run all chunks.” This will make sure that your code is all running properly.
14. Save your notebook as both a .Rmd file (default save setting)
15. Knit your notebook as an html and make sure you can open it.
16. Upload your completed html notebook to the Dropbox folder labeled: “Turn in Completed Module 4 R Notebook.”